

California Influenza and Other Respiratory Disease Surveillance for Week 9 (February 26-March 3, 2012)

Note: This report includes data from many different sources of influenza surveillance, including syndromic surveillance, laboratory surveillance, and mandatory reporting of influenza deaths for cases ages 0-64 years. The information contained in this report should be viewed as a “snapshot” of influenza activity for each surveillance week, and should not be considered as population-based data or representative of all California public health jurisdictions.

In week 9, the geographic distribution of influenza in California remained “widespread*.”

Influenza Report Highlights

- Outpatient influenza-like illness (ILI) was down 0.4% in week 9 (1.9%) compared to week 8 (2.3%).
- Of 2206 specimens tested during week 9,
 - 467 (21.2%) were positive for influenza; of these
 - 42 (9.0%) were influenza B and
 - 425 (91.0%) were influenza A.
 - 92 (21.6%) were subtyped as seasonal A (H3),
 - 54 (12.7%) were subtyped as 2009 A (H1), and
 - 279 (65.6%) were not subtyped.
- No resistance to neuraminidase inhibitors has been identified in 44 influenza isolates tested during the 2011-2012 influenza season.
- Forty-five specimens from California residents have been strain-typed this season; all but four influenza B strains match the 2011-12 influenza vaccine.
- Three laboratory-confirmed influenza-associated deaths among persons less than 65 years were reported in week 9.
- No suspected or confirmed influenza A (H3N2)v [variant influenza A (H3N2), formerly called swine-origin triple reassortant A (H3N2)] have been detected in California.

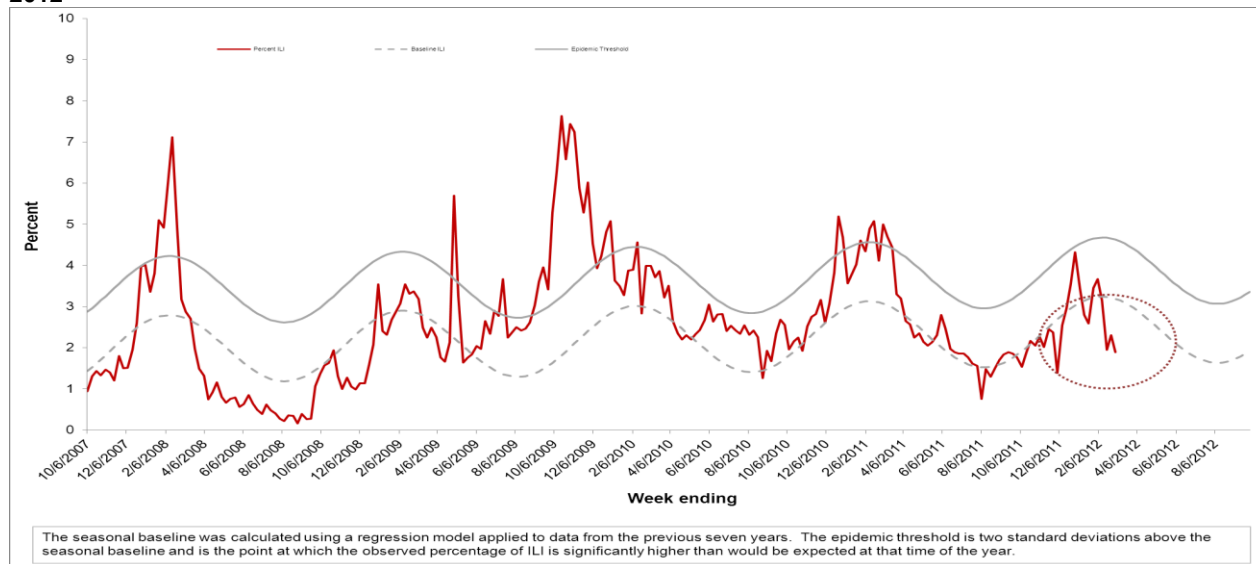
*For the Centers for Disease Control and Prevention (CDC) definitions of influenza geographic distribution, please go to <http://www.cdc.gov/flu/weekly/overview.htm>.

A. Syndromic Surveillance Update

1. CDC Influenza Sentinel Providers

A total of 82 (41.4%) out of 198 enrolled sentinel providers have reported data for week 9. Based on available data, the percentage of ILI visits for week 9 (1.9%) was below baseline (Figure 1).

Figure 1. Percentage of Influenza-like Illness Visits Among Patients Seen by California Sentinel Providers, 2007–2012



2. Kaiser Permanente Hospitalization Data ("Flu Admissions")

The percentage of Kaiser Permanente hospitalizations for pneumonia and influenza in Northern California decreased in week 9 (5.9%) compared to week 8 (7.2%).

B. Laboratory Update

1. Respiratory Laboratory Network (RLN) and Sentinel Laboratory Surveillance Results

The percentage of influenza detections in the RLN and sentinel laboratories continued an upward trend that started in week 3, with an increase of 0.8% in week 9 (21.2%) compared to week 8 (20.4%), (Figure 2). Of 2206 specimens tested by the RLN and sentinel laboratories, 42 (1.9%) were positive for influenza B and 425 (19.3%) were positive for influenza A (Figure 3). Of the 425 specimens that tested positive for influenza A, 92 (21.6%) were subtyped as seasonal A (H3), 54 (12.7%) were subtyped as 2009 A (H1), and 279 (65.6%) were not subtyped. The influenza-positive specimens were reported statewide.

To date for the 2011-2012 season, of 29,833 specimens tested, 2640 (8.8%) were positive for influenza; of these, 248 (9.4%) were influenza B and 2392 (90.6%) were influenza A. Of the 2392 specimens that tested positive for influenza A, 512 (21.4%) were subtyped as seasonal A (H3), 269 (11.2%) were subtyped as 2009 A (H1), and 1611 (67.3%) had no further subtyping performed.

Neither the RLN nor the California Department of Public Health Viral and Rickettsial Disease Laboratory (CDPH-VRDL) have identified any influenza viruses by polymerase chain reaction (PCR) typing or subtyping that are suggestive of the influenza A (H3N2)v infection.

Figure 2. Percentage of Influenza Detections in Respiratory Laboratory Network and Sentinel Laboratories, 2007–2012

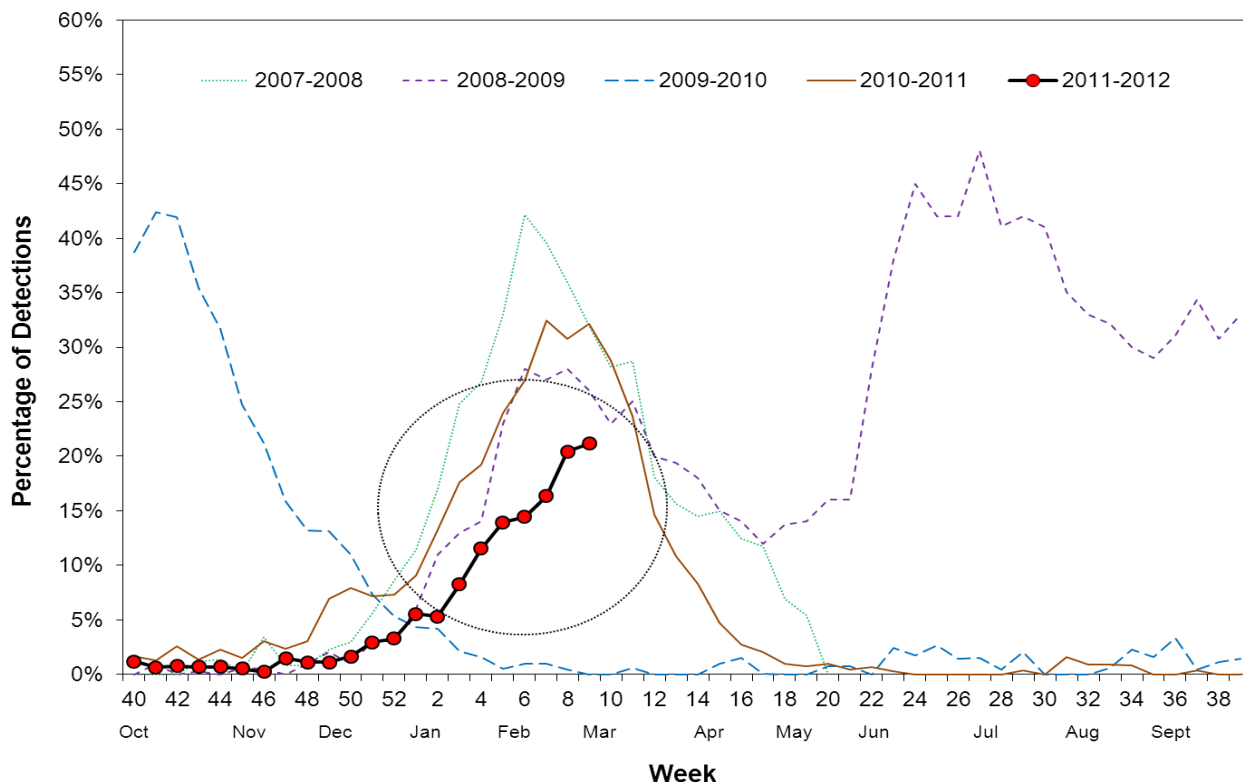
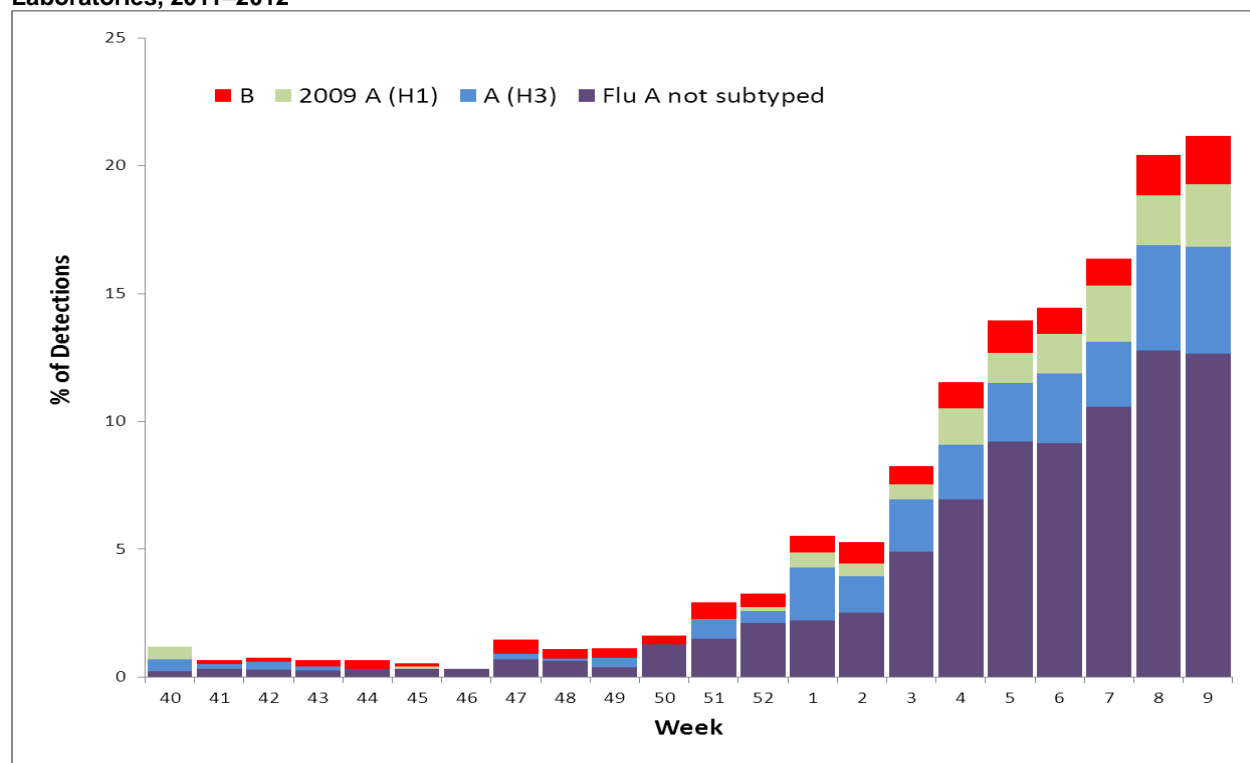
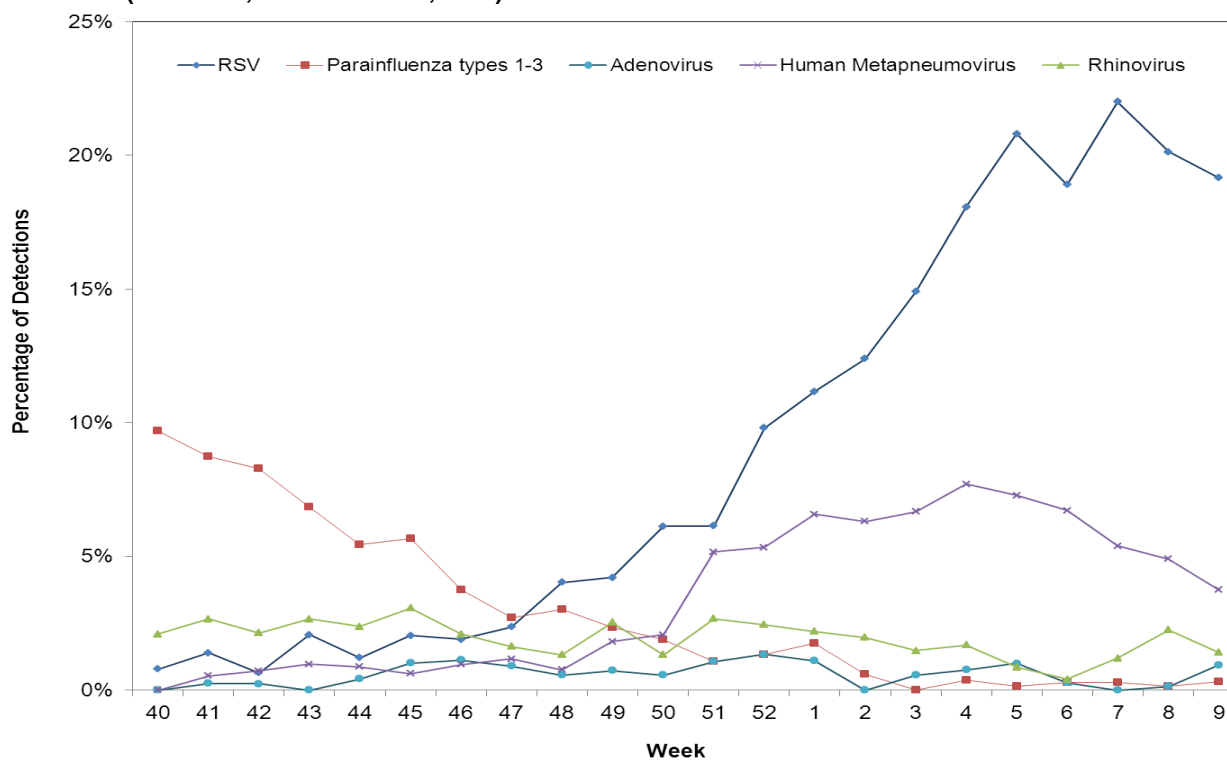


Figure 3. Percentage of Influenza Types and Subtypes in Respiratory Laboratory Network and Sentinel Laboratories, 2011–2012



The proportion of respiratory syncytial virus (RSV) detections decreased in week 9 (19.2%, compared to 20.1% in week 8). The proportion of human metapneumovirus (hMPV) detections continued a decreasing trend, with 3.7% detected in week 9 compared to 4.9% in week 8 (Figure 4).

Figure 4. Other Respiratory Pathogen Detections in Respiratory Laboratory Network and Sentinel Laboratories, Weeks 40-9 (October 2, 2011 – March 3, 2012)



2. Antiviral Resistance Testing (AVR)

CDPH-VRDL has tested 44 influenza specimens to date during the 2011-2012 influenza season; all have been sensitive to neuraminidase inhibitors (Table 1).

Table 1. Number of Specimens Tested for Antiviral Resistance

	Neuraminidase Inhibitors Resistance
Influenza A (2009 H1N1)	0/15
Influenza A (H3N2)	0/29

3. Influenza Virus Strain Characterization

Forty-five California specimens have been strain-typed to date during the 2011-2012 influenza season; all but four matched with components of the 2011-2012 vaccine for the Northern Hemisphere (Table 2).

Table 2. Influenza Virus Antigenic Characterization for the 2011-12 Season

	Total (N=45)
Influenza A	33
A/Perth/16/2009-like (H3N2)*	28
A/California/07/2009-like (H1N1)*	5
Influenza B	12
B/Brisbane/60/2008-like*	8
B/Wisconsin/01/2010-like	4

*Matches components of the 2011-12 Northern Hemisphere influenza vaccine

C. Laboratory-confirmed Fatal Case Reports

CDPH received three reports of influenza-associated deaths among persons 0-64 years in week 9; all were in adults over 36 years old. To date during the 2011-2012 influenza season, CDPH has received nine reports of influenza-associated deaths among persons less than 65 years old; two were among children 0-17 years and seven were among adults 18-64 years.

D. Influenza-associated Outbreaks

CDPH received three reports of laboratory-confirmed influenza outbreaks in week 9; one at a congregate living facility in the southern region that was associated with influenza A (no subtyping), one at a jail in the southern region that was associated with influenza A (2009 H1N1) and one at a school in the San Francisco bay area region that was associated with influenza A (H3).

For questions regarding influenza surveillance and reporting in California, please email InfluenzaSurveillance@cdph.ca.gov. This account is monitored daily by several epidemiologists.

For more information regarding the different influenza surveillance data sources, please visit the CDPH Influenza Surveillance Program at <http://www.cdph.ca.gov/programs/dcdc/Pages/CaliforniaInfluenzaSurveillanceProject.aspx>.

To obtain additional information regarding influenza, please visit the CDPH influenza website at [http://www.cdph.ca.gov/HealthInfo/discond/Pages/Influenza\(Flu\).aspx](http://www.cdph.ca.gov/HealthInfo/discond/Pages/Influenza(Flu).aspx).

A copy of the case report form for reporting any laboratory-confirmed influenza case that was either admitted to the ICU or died can be downloaded from [http://www.cdph.ca.gov/HealthInfo/discond/Pages/Influenza\(Flu\).aspx](http://www.cdph.ca.gov/HealthInfo/discond/Pages/Influenza(Flu).aspx).